

DESCRIPTION OF TABLES AND CHARTS.

Table I gives the data ordinarily needed for climatological studies for about 158 Weather Bureau stations making simultaneous observations at 8 a. m. and 8 p. m., seventy-fifth meridian time daily, and for about 41 others making only one observation. The altitudes of the instruments above ground are also given.

Table II gives a record of precipitation, the intensity of which at some period of the storm's continuance equaled or exceeded the following rates:

Duration (minutes)	5	10	15	20	25	30	35	40	45	50	60
Rates per hour (inches)	3.00	1.80	1.40	1.20	1.05	1.00	0.94	0.90	0.87	0.84	0.80

It is impracticable to make this table sufficiently wide to accommodate on one line the record of accumulated falls that continue at an excessive rate for several hours. In this case the record is broken at the end of each 50 minutes, the accumulated amounts being recorded on successive lines until the excessive rate ends.

In cases where no storm of sufficient intensity to entitle it to a place in the full table has occurred, the greatest precipitation of any single storm has been given, also the greatest hourly fall during that storm.

Table III gives, for about 30 stations of the Canadian Meteorological Service, the means of pressure and temperature, total precipitation and depth of snowfall, and the respective departures from normal values, except in the case of snowfall.

Chart I.—Hydrographs for several of the principal rivers of the United States.

Chart II.—Tracks of centers of high areas; and

Chart III.—Tracks of centers of low areas. The roman numerals show the chronological order of the centers. The figures within the circles show the days of the month; the letters *a* and *p* indicate, respectively, the observations at 8 a. m. and 8 p. m., 75th meridian time. Within each circle is also given (Chart II) the last three figures of the highest barometric reading and (Chart III) the lowest reading reported at or near the center at that time, and in both cases as reduced to sea level and standard gravity.

Chart IV.—Temperature departures. This chart presents the departures of the monthly mean temperatures from the monthly normals. The normals used in computing the departures were computed for a period of 31 years (1883 to 1903) and are published in Weather Bureau Bulletin "R," Washington, 1908. The shaded portions of the chart indicate areas of positive departures and unshaded portions indicate areas of negative departures. Generalized lines connect places having approximately equal departures of like sign. This chart of monthly temperature departures in the United States

was first published in the MONTHLY WEATHER REVIEW for July, 1909.

Chart V.—Total precipitation. The scale of shades showing the depth is given on the chart. Where the monthly amounts are too small to justify shading, and over sections of the country where stations are too widely separated or the topography is too diversified to warrant reasonable accuracy in shading, the actual depths are given for a limited number of representative stations. Amounts less than 0.005 inch are indicated by the letter T, and no precipitation by 0.

Chart VI.—Percentage of clear sky between sunrise and sunset. The average cloudiness at each Weather Bureau station is determined by numerous personal observations between sunrise and sunset. The difference between the observed cloudiness and 100 is assumed to represent the percentage of clear sky, and the values thus obtained are the basis of this chart. The chart does not relate to the night time.

Chart VII.—Isobars and isotherms at sea level and prevailing wind directions. The pressures have been reduced to sea level and standard gravity by the method described by Prof. Frank H. Bigelow on pages 13-16 of the REVIEW for January, 1902. The pressures have also been reduced to the mean of the 24 hours by the application of a suitable correction to the mean of the 8 a. m. and 8 p. m. readings at stations taking two observations daily, and to the 8 a. m. or the 8 p. m. observations, respectively, at stations taking but a single observation. The diurnal corrections so applied will be found in the Annual Report of the Chief of the Weather Bureau, 1900-1901, volume 2, Table 27, pages 140-164.

The isotherms on the sea-level plane have been constructed by means of the data summarized in chapter 8 of volume 2 of the annual report just mentioned. The correction $t_0 - t$, or temperature on the sea-level plane minus the station temperature as given by Table 48 of that report, is added to the observed surface temperature to obtain the adopted sea-level temperature.

The prevailing wind directions are determined from hourly observations at the great majority of the stations; a few stations having no self-recording wind direction apparatus determine the prevailing direction from the daily or twice-daily observations only.

Chart VIII.—Total snowfall. This is based on the reports from regular and cooperative observers and shows the depth in inches and tenths of the snowfall during the month. In general, the depth is shown by lines inclosing areas of equal snowfall, but in special cases figures are also given.

Chart VIII is published only when the general snow cover is sufficiently extensive to justify its preparation.

TABLE I.—Climatological data for United States Weather Bureau stations, December, 1914.

Districts and stations.	Elevation of instruments.		Pressure in inches.			Temperature of the air, in degrees Fahrenheit.						Precipitation, inches.			Wind.			Average cloudiness, tenths.		Total snowfall. Snow on ground at end of month.												
	Barometer above sea level, feet.	Thermometer above ground.	Anemometer above ground.	Station, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hours.	Departure from normal.	Mean maximum.	Departure from normal.	Mean minimum.	Date.	Mean maximum.	Minimum.	Greatest daily range.	Mean wet thermometer.	Mean temperature of the dew point.	Mean relative humidity, per cent.	Total.	Departure from normal.	Days with 0.01 or more.	Total movement, miles.	Prevailing direction.	Maximum velocity.	Clear days.	Partly cloudy days.	Cloudy days.							
							27.3	-2.1	21.6	21	21	17	39	75	3.28	-0.1	8	9,942	w.	70	se.	14	11	6	14	5.9	9.0	T.				
New England.																											6.2					
Eastport.....	76	67	85	30.04	30.12	+ .14	23.6	-1.7	53	1	31	-11	26	17	39	21	1.95	-2.0	8	9,942	w.	70	se.	14	11	6	14	5.9	9.0	T.		
Greenville.....	1,070	6	117	28.59	30.17	+ .14	15.8	.....	53	1	25	-19	27	7	30	1	1.50	.....	6	7,481	n.	48	se.	14	13	7	11	5.1	8.1	3.1
Portland, Me.	103	82	117	30.04	30.17	+ .14	24.4	-2.7	53	3	32	-6	26	17	29	21	2.98	-0.7	10	7,481	n.	48	se.	14	9	8	14	5.7	9.3	6.3		
Concord.....	288	70	79	29.85	30.18	+ .12	22.4	-4.0	56	1	32	-20	27	12	34	1	2.07	-1.3	10	3,895	w.	28	w.	14	9	8	14	5.7	7.1	4.6		
Burlington.....	404	11	48	29.70	30.17	+ .12	21.2	-1.3	52	2	29	-17	26	14	27	1	1.25	-0.4	9	8,981	n.	48	s.	14	11	4	11	6.8	7.1	4.6		
Northfield.....	876	12	60	29.18	30.17	+ .12	17.9	-2.6	57	2	29	-32	26	6	47	15	1.19	-1.5	5	2,233	s.	29	sw.	30	6	11	14	6.4	14.7	8.8		
Boston.....	125	115	183	30.02	30.16	+ .11	30.4	-1.2	62	3	37	-2	26	24	31	26	3.46	0.0	8	5,555	w.	40	se.	14	6	11	14	6.4	4.1	0.2		
Nantucket.....	12	14	90	30.11	30.12	+ .07	34.7	-2.0	56	2	40	14	26	30	26	32	6.73	+ 3.1	13	14,496	n.	68	ne.	7	5	12	14	6.8	2.2			
Block Island.....	26	11	46	30.10	30.13	+ .07	34.0	-2.6	54	3	39	6	26	29	28	31	4.98	+ 1.2	11	16,409	w.	71	se.	7	7	5	19	7.1	1.2			
Narragansett Pier.....	9	.....	.....	.....	.....	.....	31.2	-1.3	61	3	39	-1	26	24	34	1	5.14	.....	12	.....	.....	.....	.....	.....	15	4	12	0.4		
Providence.....	160	215	251	29.98	30.16	+ .10	29.2	-2.4	61	3	36	2	26	23	30	26	2.93	-1.0	12	10,431	nw.	50	se.	14	11	7	13	5.8	1.5			
Hartford.....	159	122	140	29.99	30.17	+ .10	28.3	-1.5	59	3	35	-8	27	21	27	25	3.85	+ 0.3	9	5,133	n.	27	sw.	14	8	9	14	6.2	2.5	0.8		
New Haven.....	106	117	155	30.04	30.16	+ .09	30.4	-1.4	63	3	37	-1	27	24	31	26	2.0	68	n.	44	ne.	7	11	7	13	5.8	3.0	T.				
Middle Atlantic States.							31.8	-3.2	.....	.....	.....	.....	.....	.....	.....	78	4.87	+ 1.7	.....	.....	.....	.....	.....	.....	.....	.....	6.9			
Albany.....	97	102	115	30.07	30.19	+ .11	26.1	-1.4	62	2	34	-18	27	19	35	23	1.84	-0.7	12	5,864	s.	35	s.	19	9	8	14	6.2	6.2	0.8		
Binghamton.....	871	10	69	29.19	30.16	+ .07	24.8	-2.9	68	2	32	-16	27	17	40	28	2.18	-0.3	14	4,116	ne.	24	nw.	21	4	9	18	7.3	16.5	4.0		
New York.....	314	414	454	29.81	30.16	+ .07	31.5	-2.9	61	3	36	24	26	35	28	23	4.01	+ 0.6	11	12,511	ne.	62	sw.	14	7	8	24	6.9	2.4			
Harrisburg.....	374	94	104	29.79	30.21	+ .09	29.4	-3.4	59	3	35	1	27	24	26	26	4.63	+ 2.0	12	5,084	w.	24	w.	15	6	5	20	7.0	8.4	2.0		
Philadelphia.....	117	123	180	30.05	30.18	+ .07	33.3	-2.4	63	3	39	8	27	28	24	30	7.35	+ 4.3	8	8,520	nw.	31	ne.	5	7	7	17	6.5	1.0			
Reading.....	325	81	98	29.32	30.20	.....	29.6	.....	62	3	35	2	27	24	22	27	5.62	+ 2.2	14	4,913	nw.	28	nw.	21	7	6	18	6.9	5.2	T.
Scranton.....	805	111	119	29.28	30.18	+ .08	28.0	-1.8	69	2	35	-3	27	21	27	25	2.1	1.6	15	5,180	nw.	30	sw.	14	8	7	17	7.1	12.1	T.		
Atlantic City.....	52	37	45	30.10	30.16	+ .06	34.4	-2.0	60	3	39	8	26	29	29	32	2.8	2.45	1.5	13	7,028	n.	40	ne.	7	8	4	19	7.0	1.2		
Cape May.....	18	13	49	30.16	30.18	+ .07	34.6	-3.4	55	2	40	10	26	29	26	33	6.64	+ 2.9	16	7,580	n.	38	de.	5	6	8	17	7.2	0.7			
Trenton.....	190	159	183	29.95	30.16	30.6	63	3	36	4	27	25	28	28	2.4	78	4.64	+ 1.5	13	9,636	ne.	42	ne.	7	8	6	17	6.6	2.5	
Baltimore.....	123	100	113	30.06	30.20	+ .07	33.4	-3.5	63	3	39	5	27	28	24	30	4.01	+ 1.3	11	5,747	n.	27	ne.	5	8	5	18	6.5	2.5			
Washington.....	112	62	85	30.06	30.19	+ .05	32.5	-3.3	64	2	35	2	27	27	26	30	2.57	1.3	13	5,275	nw.	33	nw.	30	7	8	16	7.0	3.5	T.		
Lynchburg.....	881	153	188	29.39	30.16	+ .02	35.0	-3.3	65	3	34	0	27	28	30	32	4.68	+ 1.4	14	4,941	ne.	33	nw.	30	7	8	16	6.2	2.2	T.		
Mount Weather.....	1,725	10	75	29.30	30.18	+ .03	27.0	-4.5	59	2	32	1	15	22	26	25	4.22	+ 1.1	16	11,765	nw.	70	nw.	26	6	5	20	7.0	1.5			
Norfolk.....	91	170	205	30.05	30.15	+ .02	40.0	-3.0	67	1	45	19	26	35	25	35	4.69	+ 1.2	16	10,063	n.	48	se.	13	3	9	19	7.5	2.7			
Richmond.....	144	11	52	30.02	30.18	+ .04	35.7	-5.3	68	1	41	7	27	30	21	33	2.9	80	4.95	+ 2.0	19	5,343	ne.	25	w.	29	7	6	18	6.8	5.4	T.
Wytheville.....	2,293	40	47	27.89	30.17	+ .02	30.9	-4.4	57	1	38	-5	27	24	33	23	6.14	+ 2.4	16	3,824	w.	22	w.	22	10	14	7	6	16.2	2.0		
South Atlantic States.							44.9	-2.3	.....	.....	.....	.....	.....	.....	.....	82	4.26	+ 0.6	.....	.....	.....	.....	.....	.....	.....	.....	7.8			
Asheville.....	2,255	70	84	27.72	30.16	.00	36.2	-1.6	67	2	43	4	16	30	31	33	6.51	+ 2.4	15	5,891	nw.	34	e.	4	3	9	19	7.5	3.1			
Charlotte.....	773	68	76	29.28	30.14	-0.02	38.4	-4.5	63	1	44	15	27	33	19	36	5.53	+ 2.7	13	4,891	ne.	32	w.	29	5	4	22	8.0				
Hatteras.....	11	12	50	30.08	30.09	-0.04	48.0	-0.9	70	21	53	31	15	43	25	45	4.71	-0.4	14	12,947	n.	49	ll.	26	6	2	23	8.4				
Manteo.....	12	4	46	.....	.....	.....	46.4	.....	68	19	54	24	15	39	30	47	4.17	-1.0	9	.....	.....	.....	.....	6	7	18	7.5			
Raleigh.....	378	103	110	29.73	30.15	.00	38.6	-4.1	68	1	44	15	27	33	20	35	6.60	+ 3.4	13	5,672	n.	29	de.	25	5	4	22	7.9				
Wilmington.....	78	81	91	30.09	30.12	-0.03	45.6	-1.6	72	1	53	20	26	39	29	42	3.39	0.7	17	5,693	n.	29	w.	29	4	2	20	7.6				
Charleston.....	48	11	92	30.05	30.10	-0.05	48.8	-2.5	68	25	55	23	17	43	24	45	4.21	0.8	13	5,921	n.	31	nw.	29	6	4	21	7.4				
Columbia, S. C.	351	41	57	29.74	30.14	-0.02	43.4	-3.8	68	1	49	20	17	37	23	40	3.13	+ 0.2	14	4,750	ne.	25	ne.	26	6	5	20	7.3				
Augusta.....	180	89	97	30.93	30.13	-0.03	45.4	-1.6	70	1	52	22	17	39	30	46	3.76	0.7	13	4,650	nw.	29	4	5	22	8.0						
Savannah.....	65	150	193	30.04	30.10	-0.05	49.8	-1.5	76	25	56	27	17	43	25	46	4.21	0.6	14	8,133	nw.	40	w.	29	4	7	20					

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TABLE I.—Climatological data for United States Weather Bureau stations, December, 1914—Continued.

Districts and stations.	Elevation of instruments.		Pressure in inches.		Temperature of the air, in degrees Fahrenheit.						Precipitation, inches.		Wind.		Snow on ground at end of month.																	
	Barometer above sea level, feet.	Thermometer above ground.	Station, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hours.	Departure from normal.	Mean max. + mean min. +2.	Mean maximum.	Departure from normal.	Maximum.	Date.	Mean minimum.	Greatest daily range.	Mean wet thermometer.	Total.	Days with 0.01 or more.	Total movement, miles.	Prevailing direction.	Maximum velocity.	Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.	Total snowfall.									
						31.4	— 5.4						83	4.72	+ 1.3																	
Ohio Valley and Tennessee.																						7.8										
Chattanooga.	762	189	213	29.34	30.18	+ .02	38.4	— 4.2	62	1	44	6	15	33	20	35	31	78	8.17	+ 3.8	16	5,830	ne.	30	sw.	29	3	4	24	8.3	5.2	...
Knoxville.	996	93	100	29.07	30.16	+ .00	36.8	— 2.9	64	1	43	5	15	31	24	34	32	82	7.86	+ 3.7	14	3,405	ne.	32	sw.	29	2	7	22	8.4	8.0	...
Memphis.	399	76	97	29.75	30.22	+ .07	36.2	— 7.3	63	2	42	11	15	31	19	34	30	80	6.35	+ 2.0	17	5,385	n.	36	sw.	29	7	4	24	7.2	8.7	...
Nashville.	546	168	191	29.59	30.19	+ .04	35.8	— 5.3	63	1	42	4	15	29	25	33	31	84	5.06	+ 1.2	12	6,130	ne.	34	w.	21	3	3	21	8.0	4.2	...
Lexington.	989	75	102	29.06	30.17	+ .03	30.4	— 6.0	62	1	36	7	15	24	23	28	28	86	4.06	+ 0.3	14	7,622	n.	38	ne.	25	5	5	21	8.0	10.7	...
Louisville.	25	219	255	29.60	30.20	+ .08	31.1	— 7.0	62	2	37	0	15	25	25	30	28	86	4.06	+ 0.3	16	2,850	ne.	30	sw.	29	2	5	21	7.7	4.1	T.
Evansville.	431	73	82	29.71	30.20	+ .07	31.0	— 5.4	64	2	36	3	15	26	24	26	29	83	3.37	+ 0.3	16	5,058	ne.	30	sw.	29	2	5	21	7.7	11.1	1.7
Indianapolis.	822	154	164	29.27	30.19	+ .05	29.5	— 6.8	62	1	32	— 7	15	19	23	24	22	86	2.29		15	6,774	rw.	29	w.	29	1	1	13	7.7	8.5	0.5
Terre Haute.	575	96	129	29.55	30.20		26.8		62	1	33	— 5	26	19	25	26	22	82	3.14	+ 0.2	14	5,582	w.	30	sw.	29	1	1	21	7.6	4.4	...
Cincinnati.	628	152	180	29.48	30.19	+ .06	28.0	— 6.2	62	1	36	3	15	24	26	29	26	82	3.14	+ 0.2	14	5,582	w.	30	sw.	29	1	1	21	7.6	4.4	...
Columbus.	824	173	222	29.27	30.18	+ .06	27.6	— 5.2	59	1	34	— 4	15	26	25	25	22	80	2.91	+ 0.2	17	8,721	w.	34	sw.	30	6	1	21	7.7	6.0	T.
Dayton.	899	181	216	29.16	30.16	+ .07	28.6	— 6.5	62	1	33	— 5	15	20	23	25	23	85	2.86	+ 0.2	16	7,709	ne.	39	w.	30	5	3	23	6.9	5.6	T.
Pittsburgh.	842	353	410	29.24	30.18	+ .07	29.9	— 4.3	62	2	36	— 2	15	24	27	23	23	77	4.37	+ 1.6	13	8,808	w.	46	w.	30	4	6	21	8.0	9.1	0.1
Elkins.	1,940	41	50	28.04	30.20	+ .06	28.7	— 3.8	59	2	37	— 10	16	21	39	26	84	5.16	+ 1.7	20	3,081	w.	24	sw.	30	4	3	24	8.0	7.1	...	
Parkersburg.	638	77	84	29.51	30.19	+ .05	30.6	— 4.6	64	1	37	— 5	16	24	32	28	26	83	4.75	+ 2.0	18	4,104	sw.	24	nw.	30	4	3	24	8.0	7.1	...
Lower Lake Region.																												7.9				
Buffalo.	767	247	280	29.28	30.15	+ .09	26.0	— 4.1	59	1	31	2	26	21	26	24	22	84	3.49	+ 0.1	16	15,488	w.	78	sw.	21	2	6	23	8.6	28.2	4.0
Canton.	448	10	61	29.64	30.14		26.2	— 2.1	58	2	28	— 29	26	13	34	24	21	82	2.15	+ 1.4	11	10,005	sw.	53	w.	21	7	4	20	7.3	20.1	4.5
Oswego.	335	76	91	29.77	30.15	+ .09	25.4	— 3.3	59	2	31	— 9	26	20	35	24	21	82	4.34	+ 0.8	15	9,468	s.	42	w.	21	2	5	24	8.4	41.7	10.5
Rochester.	523	97	113	29.57	30.17	+ .11	26.4	— 2.5	60	1	32	— 1	26	21	24	24	20	75	2.31	+ 0.6	14	7,910	sw.	42	w.	21	7	2	22	7.8	16.1	3.0
Syracuse.	597	97	113	29.50	30.17	+ .10	25.4	— 2.9	64	2	31	— 12	26	19	31	23	18	75	3.16	+ 0.5	14	9,163	s.	48	s.	21	5	5	21	7.3	15.8	3.0
Erie.	714	92	102	29.35	30.15	+ .08	27.6	— 4.1	62	1	33	0	26	22	29	25	21	77	3.42	+ 0.4	23	9,444	sw.	36	s.	21	1	4	26	8.7	18.2	0.9
Cleveland.	762	190	201	29.32	30.17	+ .08	27.0	— 4.1	55	1	32	— 1	15	22	31	25	20	77	2.77	+ 0.4	18	10,180	sw.	36	w.	21	6	1	21	8.0	20.3	0.1
Sandusky.	629	62	103	29.47	30.18	+ .09	26.4	— 6.7	55	1	31	— 4	15	20	27	24	21	83	3.05	+ 0.7	17	10,751	sw.	37	sw.	14	4	5	22	7.5	12.8	2.5
Toledo.	628	208	246	29.48	30.19	+ .11	21.1	— 6.1	56	1	30	— 3	15	18	26	26	20	84	4.18	+ 1.9	15	12,261	sw.	41	sw.	14	3	3	21	7.1	18.5	5.7
Fort Wayne.	856	113	124	29.22	30.19		22.6	— 4.7	57	1	29	— 10	15	16	27	21	19	85	3.55		15	7,720	sw.	33	sw.	29	6	3	22	7.2	22.0	4.8
Detroit.	730	218	245	29.34	30.17	+ .10	23.8	— 5.7	57	1	30	— 1	15	18	24	22	20	83	2.42	0.0	15	10,731	w.	39	w.	21	2	8	21	8.2	15.1	5.0
Upper Lake Region.																												7.5				
Alpena.	609	13	92	29.45	30.15	+ .13	21.8	— 3.0	48	1	28	— 3	25	16	22	29	17	82	0.86	+ 1.4	9	9,762	w.	36	nw.	22	2	12	17	7.4	15.2	7.1
Escanaba.	612	54	60	29.47	30.17	+ .13	10.8	— 4.8	45	1	23	— 7	24	11	20	15	11	75	0.34	+ 1.3	8	9,703	n.	37	ne.	8	9	10	12	5.7	4.0	2.5
Grand Haven.	632	54	92	29.46	30.17	+ .12	25.3	— 4.8	54	1	30	— 3	3	19	21	23	20	81	2.05	+ 0.5	20	10,296	w.	43	sw.	21	2	5	24	8.8	15.2	2.0
Grand Rapids.	707	70	87	29.37	30.18	+ .13	23.6	— 4.2	56	1	29	— 7	20	23	23	23	20	82	1.89	+ 0.6	19	5,694	ne.	24	w.	21	1	3	27	9.2	17.6	7.0
Houghton.	684	62	72	29.40	30.16	+ .14	17.2	— 3.7	48	1	22	— 5	31	12	20	20	18	87	2.35	+ 0.1	15	7,803	w.	36	w.	21	1	6	24	8.6	24.0	15.7
Lansing.	578	11	62	29.18	30.16		21.8	— 5.2	59	1	28	— 15	26	15	31	20	18	87	1.57	+ 0.5	20	5,319	w.	20	sw.	21	3	7	21	8.0	14.4	7.1
Ludington.	637	60	66	29.44	30.16		24.6	— 4.5	54	1	30	— 4	14	20	21	23	20	81	1.77		20	9,651	w.	38	w.	21	1	2	23	8.0	18.0	0.0
Marquette.	734	77	111	29.33	30.15	+ .16	18.4	— 4.5	50	1	24	— 5	23	13	21	16	11	75	0.85	+ 1.7	9	9,406	sw.	42	sw.	18	3	3	23	8.0	9.2	4.4
Port Huron.	638	70	120	29.44	30.16	+ .10	22.8	— 4.5	54	1	29	— 7	20	17	21	18	83	1.33	+ 0.8	13	9,203	sw.	32	w.	14	3	3	23	7.2	13.4	8.8	
Saginaw.	641	48	82	29.44	30.17		22.0	— 4.5	57	1	28	— 12	26	16	27	21	19	90	1.36	+ 0.6	15	7,955	ne.	30	ne.	8	3	3	20	7.9	11.6	10.4
Sault Ste. Marie.	614	11	61	29.41	30.15	+ .15	18.8	— 1.7	44	1	25	— 9	25	12	22	17	13	90	2.01	+ 0.2	19	7,171	sw.	46	nw.	22	2	12	17	7.6	21.5	14.8
Chicago.	824	140	310	29.27	30.20	+ .12	24.1	— 5.2	58	1	30	— 4	16	24	27	21	17	71	2.33	+ 0.3</												

TABLE I.—Climatological data for United States Weather Bureau stations, December, 1914—Continued.

Districts and stations.	Elevation of instruments.			Pressure in inches.			Temperature of the air, in degrees Fahrenheit.						Precipitation, inches.			Wind.			Average cloudiness, tenths.			Snow on ground at end of month.									
	Barometer above sea level, feet.	Thermometer above ground.	Anerometer above ground.	Station, reduced to sea level, reduced to mean of 24 hours.	Departure from normal.	Mean max. + mean min. + 2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.	Mean wet thermometer.	Mean temperature of the dew point.	Mean relative humidity, per cent.	Total movement, miles.	Prevailing direction.	Maximum velocity.	Clear days.	Partly cloudy days.	Cloudy days.	Total snowfall.							
																		Miles per hour.	Date.												
<i>Northern Slope.</i>						17.2	- 6.5	10.8 - 10.4	43	3	20	- 25	16	2	41	11	9	91	0.66 - 0.0	9	4,765	w.	32 sw.	31	6	9	16	6.8	6.7	6.4	
Havre	2,505	11	44	27.42	30.20	+ .15	20.0	- 4.8	43	3	27	- 6	16	13	22	17	14	79	0.25 - 0.6	8	4,104	nw.	30 w.	29	6	9	16	6.6	4.3	0.1	
Helena	4,110	87	114	25.81	30.19	+ .06	19.0	- 4.9	44	3	26	- 4	18	12	22	17	14	83	0.40 - 1.4	8	2,322	nw.	11 nw.	20	8	10	13	6.1	4.0	1.8	
Kalispell	2,962	11	34	27.00	30.20	+ .13	19.0	- 4.9	44	3	26	- 4	18	12	22	17	14	73	0.49 - 0.1	8	3,041	w.	18 ne.	26	12	10	9	5.0	4.5	0.3	
Miles City	2,371	26	48	27.57	30.26	+ .18	15.2	- 5.8	47	2	24	- 20	18	6	36	13	9	79	0.46 - 0.0	5	5,013	n.	36 n.	31	9	11	11	5.8	4.2	0.3	
Rapid City	3,259	50	58	26.64	30.25	+ .16	19.8	- 5.2	54	3	30	- 6	16	10	36	16	11	73	0.16 - 0.2	4	7,883	w.	58 w.	31	13	10	8	5.1	1.8	T.	
Cheyenne	6,088	84	101	23.94	30.18	+ .09	20.2	- 8.8	45	4	30	- 6	16	10	33	17	12	74	0.31 - 0.4	5	1,956	sw.	19 se.	23	7	18	6	5.4	3.5	T.	
Lander	5,872	60	68	24.62	30.24	+ .06	15.2	- 4.0	49	31	28	- 15	17	2	39	10	7	81	0.14 - 0.2	6	4,610	s.	24 n.	14	9	12	10	4.8	2.3	T.	
Sheridan	3,790	10	47	26.13	30.21	- .01	14.2	- 4.8	31	21	17	- 9	0	2	34	13	8	71	0.07 - 1.8	6	2,655	s.	25 sw.	21	11	4	16	6.1	0.7	0.2	
Yellowstone Park	6,200	11	48	23.82	30.21	+ .05	17.0	- 4.6	38	4	26	- 10	16	8	31	14	10	80	0.87 + 0.4	11	4,384	nw.	24 n.	20	15	5	11	4.9	7.4	1.9	
North Platte	2,821	11	51	27.18	30.28	+ .18	18.0	- 8.6	52	3	28	- 11	16	7	34													5.7			
<i>Middle Slope.</i>						24.9	- 8.1									78	0.95	+ 0.2									5.9				
Denver	5,201	129	172	24.70	30.16	+ .08	24.4	- 7.8	54	31	35	- 7	21	13	42	20	14	70	0.72 + 0.1	5	4,390	sw.	28 nw.	25	15	8	8	4.5	9.7	0.3	
Pueblo	4,686	80	86	25.28	30.15	+ .07	24.6	- 7.1	55	31	38	- 16	21	11	45	19	13	66	0.59 + 0.1	8	3,150	nw.	25 w.	11	18	7	6	3.9	8.2		
Concordia	1,398	42	51	28.71	30.26	+ .11	15.9	- 9.6	52	3	29	- 8	16	11	38	18	16	86	0.57 + 0.1	10	3,546	n.	23 nw.	29	5	6	20	7.5	5.4	1.9	
Dodge	2,509	11	51	27.48	30.21	+ .11	23.4	- 8.2	54	4	33	- 6	21	14	39	20	15	76	0.48 - 0.1	8	6,029	nw.	30 nc.	15	11	8	8	12	5.5	6.4	T.
Wichita	1,358	139	158	28.71	30.21	+ .10	25.7	- 8.5	53	4	33	- 2	14	18	31	24	21	84	0.61 - 0.2	8	7,874	n.	44 nw.	29	6	8	17	7.0	3.0	T.	
Oklahoma	2,214	10	47	28.88	30.21	+ .10	31.4	- 7.2	52	1	38	5	28	25	27	29	26	84	2.74 + 1.0	12	9,553	n.	46 nw.	29	7	7	17	7.0	9.0		
<i>Southern Slope.</i>						37.0	- 6.8									80	1.25	+ 0.4									6.2				
Abilene	1,738	10	52	28.31	30.17	+ .06	38.7	- 6.3	60	5	47	16	14	31	30	35	31	81	1.61 + 0.5	9	5,698	n.	23 sw.	26	9	3	19	6.6	T.		
Amarillo	3,676	10	49	26.30	30.15	+ .06	30.4	- 6.0	68	18	40	10	21	21	36	27	24	82	1.17 + 0.3	7	7,450	nw.	35 e.	24	13	11	7	4.7	11.6		
Del Rio	944	64	71	29.10	30.11	+ .01	45.6	- 6.8	73	1	52	25	15	39	29	32	24	21	76	0.45 - 0.4	7	5,651	se.	30 nw.	25	6	6	19	7.0		
Roswell	3,566	75	85	26.41	30.12	+ .05	33.1	- 8.1	64	18	42	12	14	24	35	30	26	77	1.78 + 1.2	11	4,288	s.	36 ne.	24	8	8	15	6.7	7.1		
<i>Southern Plateau.</i>						37.1	- 5.0									76	2.10	+ 1.5									4.7				
El Paso	3,762	110	133	26.18	30.01	- .02	42.8	- 2.0	62	18	51	22	15	34	27	38	32	70	3.94 + 3.4	10	7,338	se.	46 nw.	28	14	9	8	4.7	T.		
Santa Fe	7,013	57	62	23.18	30.10	- .04	26.0	- 4.3	46	23	34	6	15	18	27	29	19	75	1.70 + 0.9	9	4,233	e.	22 e.	30	6	15	9	5.9	18.9	2.0	
Flagstaff	6,908	8	57				23.6	- 4.8	48	3	30	- 13	15	11	47	27	22	31	1.88	9	3,040	e.	30 e.	22	9	14	8	20.7	4.5		
Phoenix	1,108	76	81	28.81	29.98	- .06	50.3	- 1.6	68	30	59	28	15	41	32	45	40	72	3.09 + 2.5	11	3,206	e.	29 e.	29	5	12	17	6.2			
Yuma	141	9	58	29.84	30.00	- .03	51.0	- 4.7	68	31	61	33	15	40	31	44	37	66	0.98 + 0.5	3	4,750	n.	30 n.	21	22	3	6	2.9			
Independence	3,910	11	42	25.95	30.03	- .08	29.0	- 12.6	50	4	40	3	20	17	30	27	28	92	0.78 - 0.0	3	3,887	nw.	32 nw.	22	18	6	7	3.8	9.5		
<i>Middle Plateau.</i>						24.4	- 6.9									75	0.50	- 0.5									5.6				
Reno	4,532	74	81	25.43	30.11	- .04	26.8	- 6.9	50	1	37	4	21	17	30	24	20	78	0.70 - 1.0	11	2,668	w.	32 se.	2	8	9	14	6.2	9.2	0.2	
Tonopah	6,080	12	20	23.99	30.11	- .04	24.8	- 6.0	62	42	50	6	20	20	16	17	15	70	0.52 - 0.3	7	5,985	n.	33 se.	2	14	6	11	4.9	5.5		
Winnemucca	4,344	18	56	25.62	30.17	- .01	18.9	- 11.8	48	1	32	- 10	14	5	39	17	13	79	0.57 - 0.4	8	3,543	ne.	20 ne.	17	9	16	8	7.2	7.8	1.0	
Modena	5,479	10	43	24.57	30.10	- .02	21.2	- 10.5	46	2	34	- 6	15	8	38	18	14	75	0.46 - 0.1	5	5,444	w.	31 sw.	28	7	12	12	5.8	5.0	0.6	
Salt Lake City	4,300	147	189	25.64	30.12	- .03	29.0	- 3.1	52	4	36	12	22	22	20	25	20	70	0.39 - 0.9	6	3,793	se.	25	3	13	11	7	4.9	4.6	1.2	
Durango	6,546	10	40																								5.6				
Grand Junction	4,602	82	96	25.41	30.09	- .01	26.2	- 2.0	49	3	35	6	15	17	28	22	18	76	0.26 - 0.2	5	3,475	e.	24 se.	22	11	9	11	5.3	4.2	T.	
<i>Northern Plateau.</i>						23.8	- 8.2									78	0.65	- 1.1									6.4				
Baker	3,471	48	53	26.50	30.21	- .05	20.8	- 6.6	59	3	30	- 4	16	11	28	18	13	73	0.56 - 1.0	7	4,676	se.	19 se.	3	11	13	7	4.6	4.9	0.7	
Boise	2,739	78	86	27.27	30.24	+ .04	24.0	- 8.2	51	3	32	3	17	16	23	21	17	74	0.47 - 1.2	5	2,586	nw.	22 se.	5	12	9	15	6.0	2.7		
Lewiston	757	40	48	29.35	30.20	+ .07	28.4	- 9.1	52	2	36	8	21	21	29	30	22	18	0.32 - 1.2	5	1,981	n.	16 ne.	17	9	16	8	6.8	0.9		
Pocatello	4,474	46	54	25.50	30.21	+ .02	19.5	- 8.9	48	3	29	- 7	22	10	28	17	14	81	0.50 - 0.3	10	3,518	se.	21 sw.	28	7	12	12	5.8	6.9	3.5	
Spokane	1,929	101	110	28.06	30.19	+ .11	24.4	- 6.4	45	1	30	7	17	18	20	22	19	78	1.46 - 1.2	12											

TABLE II.—Accumulated amounts of precipitation for each 5 minutes, for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes, or 0.80 in 1 hour, during December, 1914, at all stations furnished with self-registering gages.

Stations.	Date.	Total duration.		Total amount of precipitation.	Excessive rate.		Amount before excessive rate began.	Depths of precipitation (in inches) during periods of time indicated.													
		From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
Abilene, Tex.	24			0.76																0.16	
Albany, N. Y.	13-14			0.67															(*)		
Alpena, Mich.	29-30			0.36															(*)		
Amarillo, Tex.	24-25			0.73															(*)		
Anniston, Ala.	24-25			1.40															(*)		
Ashville, N. C.	4			1.30															.35		
Atlanta, Ga.	3-4	8.55 a. m. ¹	7.55 a. m. ³	2.41	11.07 p. m. ¹	11.31 p. m. ¹	0.48	0.13	0.36	0.43	0.46	0.54									
Atlantic City, N. J.	21			1.26																.38	
Augusta, Ga.	1			0.56															.25		
Baker, Oreg.	28			0.17															(*)		
Baltimore, Md.	29			0.49																.24	
Bentonville, Ark.	1			0.93																.42	
Binghamton, N. Y.	13			0.64																.12	
Birmingham, Ala.	25			1.59																.50	
Bismarck, N. Dak.	7			0.09															(*)		
Block Island, R. I.	7			1.18															(*)		
Boise, Idaho.	3-4			0.20															(*)		
Boston, Mass.	29			0.39																.25	
Buffalo, N. Y.	16-17			1.03															(*)		
Burlington, Vt.	13-14			0.50															(*)		
Cairo, Ill.	19			0.67															.20		
Canton, N. Y.	13-14			0.89															(*)		
Charles City, Iowa.	7-8			0.38															(*)		
Charleston, S. C.	19			0.50															.25		
Charlotte, N. C.	4			1.09															.30		
Chattanooga, Tenn.	3			2.13															.67		
Cheyenne, Wyo.	6-7			0.08															(*)		
Chicago, Ill.	29			0.70															(*)		
Cincinnati, Ohio.	4			0.71															.23		
Cleveland, Ohio.	7-8			0.51															(*)		
Columbia, Mo.	28-29			0.63															(*)		
Columbia, S. C.	29			0.59															(*)		
Columbus, Ohio.	3-4			0.69															(*)		
Concord, N. H.	13-14			1.15															(*)		
Concordia, Kans.	20			0.38															(*)		
Corpus Christi, Tex.	2			0.34															(*)		
Davenport, Iowa.	28-29			0.84															(*)		
Dayton, Ohio.	4			1.19															.17		
Del Rio, Tex.	24			0.30															.18		
Denver, Colo.	7-8			0.44															(*)		
Des Moines, Iowa.	20			0.41															(*)		
Detroit, Mich.	29			0.53															(*)		
Devils Lake, N. Dak.	1			0.22															(*)		
Dodge City, Kans.	20			0.25															(*)		
Dubuque, Iowa.	28-29			0.86															(*)		
Duluth, Minn.	26			0.17															(*)		
Durango, Colo.																					
Eastport, Me.	19			0.38															.12		
Elkins, W. Va.	3			0.17															.15		
El Paso, Tex.	24			1.48															.48		
Erie, Pa.	14-15			0.71															(*)		
Escanaba, Mich.	20-21			0.12															(*)		
Eureka, Cal.	5			0.58															.33		
Evansville, Ind.	29			0.50															.18		
Flagstaff, Ariz.	17-18			0.69															(*)		
Fort Smith, Ark.	2			0.54															.21		
Fort Wayne, Ind.	29			0.64															.16		
Fort Worth, Tex.	1-2	4.12 a. m.	3.15 a. m. ⁴	2.25	7.30 a. m. ³	7.42 a. m. ³	0.27	0.25	0.53	0.61											
Fresno, Cal.	10			0.61															.19		
Galveston, Tex.	28			0.46															.39		
Grand Haven, Mich.	29			0.80															(*)		
Grand Junction, Colo.	7			0.10															(*)		
Grand Rapids, Mich.	29			0.55															(*)		
Green Bay, Wis.	29			0.39															(*)		
Hannibal, Mo.	28-29			0.55															(*)		
Harrisburg, Pa.	7			1.52															.21		
Hartford, Conn.	13-14			1.40															(*)		
Hatteras, N. C.	13	11.35 a. m.	7.35 p. m.	1.50	7.02 p. m.	7.14 p. m.	1.09	.07	.30	.41											
Havre, Mont.	6-7	11.07 a. m.	3.55 p. m.	0.71	3.25 p. m.	3.39 p. m.	0.34	.07	.30	.35									(*)		
Helena, Mont.	28			0.25															(*)		
Houghton, Mich.	14-15			0.82															(*)		
Houston, Tex.	1-2	4.20 p. m. ³	5.45 a. m. ⁴	7.40	8.46 p. m.	8.58 p. m.	1.10	.08	.27	.47	.77	1.12	1.33	1.62	1.90	2.08	2.25	2.54	3.21	3.42	
Do.	28	8.03 a. m.	7.20 p. m.	1.02	4.23 a. m. ⁴	4.44 a. m.	6.74	.10	.24	.44	.43	.52	.59	.65	.70	.75	.93	1.14			
Huron, S. Dak.	7-8			0.14															(*)		
Independence, Cal.	16			0.44															(*)		
Indianapolis, Ind.	2			0.12															.11		
Iola, Kans.	20			0.44															(*)		
Jacksonville, Fla.	13			2.01															.67		
Kalispell, Mont.	26			0.19															(*)		
Kansas City, Mo.	11-12			0.41															(*)		
Keokuk, Iowa.	29			0.56															(*)		
Key West, Fla.	16			1.85															.65		
Knoxville, Tenn.	24-25			2.68															(*)		
La Crosse, Wis.	20			0.21															(*)		
Lander, Wyo.	7-8			0.25															(*)		
Lansing, Mich.	29			0.46															(*)		
Lewiston, Idaho.	28			0.17															.06		
Lexington, Ky.	19			0.83															.25		
Lincoln, Nebr.	20			0.44															(*)		
Little Rock, Ark.	12			1.50															.62		
Los Angeles, Cal.	1			0.76															.44		
Louisville, Ky.	29			0.																	

TABLE II.—Accumulated amounts of precipitation for each 5 minutes, for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes, or 0.80 in 1 hour, during December, 1914, at all stations furnished with self-registering gages—Continued.

* Self-register not working.

TABLE III.—*Data furnished by the Canadian Meteorological Service, December, 1914.*

Stations.	Pressure.			Temperature.						Precipitation.		
	Station reduced to mean of 24 hours.	Sea level reduced to mean of 24 hours.	Departure from normal.	Mean max. + mean min. +2.	Departure from normal.	Mean maximum.	Mean minimum.	Highest.	Lowest.	Total.	Departure from normal.	Total snowfall.
St. Johns, N. F.	Inches.	Inches.	Inches.	°F.	°F.	°F.	°F.	°F.	°F.	Inches.	Inches.	Inches.
29.73	29.87	+0.07	24.8	-3.9	30.2	19.4	47	6	1.76	-3.27	8.0	
Sydney, C. B. I.	30.00	30.04	+.05	26.3	-1.9	32.6	20.0	52	4	1.92	-2.71	11.0
Halifax, N. S.	30.00	30.11	+.15	22.4	-5.2	34.6	10.1	55	-14	4.32	-0.80	8.8
Yarmouth, N. S.	30.04	30.11	+.13	29.2	-1.5	35.5	22.8	53	6	3.80	-1.24	15.3
Charlottetown, P. E. I.	30.02	30.06	+.12	23.2	-1.1	28.9	17.4	47	-9	1.58	-2.08	5.5
Chatham, N. B.	30.05	30.12	+.18	17.4	+0.4	26.3	8.5	49	-24	1.03	-1.59	9.6
Father Point, Que.	30.05	30.08	+.13	16.0	+0.6	22.6	9.4	44	-13	1.24	-1.59	10.4
Quebec, Que.	29.78	30.12	+.11	14.4	-0.8	21.3	7.5	44	-23	2.26	-1.43	16.0
Montreal, Que.	29.94	30.16	+.13	18.6	+0.8	24.8	12.3	48	-16	3.30	-0.35	27.8
Stonecliffe, Ont.	29.51	30.14	+.13	14.7	-0.3	23.0	6.4	43	-40	2.10	-0.39	19.0
Ottawa, Ont.	29.89	30.24	+.22	16.8	-0.2	25.0	8.6	45	-24	2.75	-0.16	19.1
Kingston, Ont.	29.84	30.18	+.14	23.8	+0.1	30.2	17.3	51	-20	2.47	-0.77	17.1
Toronto, Ont.	29.74	30.14	+.09	25.7	-1.3	31.5	20.0	54	-7	1.76	-1.15	15.2
White River, Ont.	28.70	30.09	+.12	4.2	-5.5	18.2	-10.0	41	-46	1.50	-0.21	13.0
Port Stanley, Ont.	29.48	30.15	+.08	24.4	-4.0	31.3	17.6	54	-25	2.32	-0.10	17.2
Southampton, Ont.	29.39			24.2	-2.5	29.5	18.9	53	-2	3.91	-0.07	36.4
Parry Sound, Ont.	29.40	30.14	+.13	20.5	-0.7	29.3	11.7	51	-24	3.04	-0.54	38.5
Port Arthur, Ont.	29.43	30.18	+.19	11.5	-1.7	20.0	3.0	44	-20	0.23	-0.64	1.3
Winnipeg, Man.	29.33	30.23	+.21	1.2	-2.9	9.0	-6.6	29	-27	1.40	+0.49	14.0
Minnedosa, Man.	28.27	30.21	+.19	2.2	-3.5	10.2	-5.8	25	-32	0.33	-0.29	3.3
Qu'Appelle, Sask.	27.77	30.16	+.16	3.2	-4.2	10.7	-4.4	26	-36	0.41	-0.11	4.1
Medicine Hat, Alberta	27.77	30.17	+.20	13.0	-5.2	21.3	4.6	42	-12	0.90	+0.35	9.0
Swift Current, Sask.	27.44	30.16	+.17	9.6	-6.4	17.2	2.0	42	-16	0.97	+0.19	9.7
Calgary, Alberta.	26.40	30.12	+.18	13.0	-5.2	21.6	4.5	38	-10	0.75	+0.16	7.5
Banff, Alberta.	25.35	30.20	+.26	9.7	-9.4	18.1	1.3	31	-18	0.28	-0.93	2.8
Edmonton, Alberta	27.73	30.10	+.23	9.0	-4.1	16.6	1.3	34	-20	1.49	+0.79	14.9
Prince Albert, Sask.	28.51	30.13	+.17	0.2	-2.6	4.0	-3.6	22	-40	0.56	-0.18	5.6
Battleford, Sask.	28.35	30.20	+.21	5.9	+0.5	12.6	-0.9	33	-28	0.82	+0.50	8.2
Kamloops, B. C.	28.92	30.19	+.25	21.5	-7.4	26.2	16.8	45	2	0.58	-0.20	5.8
Victoria, B. C.	29.79	29.99	+.02	29.8	-1.6	43.0	38.2	49	30	0.59	-7.39	1.0
Barkerville, B. C.	25.61	30.09	+.21	11.8	-9.1	16.9	6.7	32	-8	3.10	-0.07	31.0
Hamilton, Bermuda.	29.98	30.14	+.02	67.0	+2.3	72.3	61.6	76	56	10.46	+5.97	.....